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file ED-184F
Exple, Container,
2 June 1958 Clam MK II

MEMORANDUM FOR THE RECORD

SUBJECT: Clam Test with the Olin Special Cap at [ ] on 22 May 1958   25X1

1. The purpose of these tests was to determine if the Olin special cap would reliably initiate the clam packed with P-4 when the cap is positioned in the bottom of a well. Previous limited tests with the cap not positioned in the bottom of the well because of its shorter length had resulted in approximately 15% failures. Since this cap may be adopted as our standard barrel cap it is important that we be able to initiate the clam reliably with it.

2. This special cap contains a date charge of 10.34 grains of RDX and a priming charge of 4.8 grains of lead azide and an ignition charge of 1.1 grain of lead styphate. The inside diameter of the cap is 0.224 inches and the length is 1.75 inches which makes it approximately ½" shorter than the standard Army J-1 Blasting Cap. If this cap is to be used with the clam it will be necessary to provide a special adapter to make up for the ½" gap. In setting up for these tests the non-electric caps were provided with an Atlas electric match and the caps were positioned at the bottom of the well in the clam. Two blasting caps were used in each clam but the electric match was only put in one of these caps. This method was convenient for test purposes and is adequate for checking the initiation of the C-4 by the blasting cap. We are confident that the blasting cap will be initiated successfully by the time pencil with a proper adapter tube.

3. In all approximately 40 clams have been fired in this test and all 40 went high order. Our conclusion is that this Olin special cap is quite reliable when used in pairs in the clam. The next step is to have a special adaptor tubes made up of silicone rubber or some other flexible material which will make a suitable seal with the blasting cap and the plastic body of the clam.

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